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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,644	05/03/2007	Andrew Holmes	1512.2.167	5357
21552 7590 12/08/2010 AUSTIN RAPP & HARDMAN 170 South Main Street, Suite 735 SALT LAKE CITY, UT 84101				
EXAMINER				
SALONE, BAYAN				
ART UNIT		PAPER NUMBER		
3726				
NOTIFICATION DATE		DELIVERY MODE		
12/08/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

usptocorrespondence@austin-rapp.com

Office Action Summary

Application No.

10/580,644

Applicant(s)

HOLMES, ANDREW

Examiner

BAYAN SALONE

Art Unit

3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09/20/2010 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 6, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Townsend (US Patent No. 2,277,615) or Nilsson (US Patent No. 5,725,247).
3. Regarding Claims 1, 2, 6, 8 and 9, Townsend discloses a method of forming a structural beam (A) with openings located in the web (the openings being the channels defined on either side of the beam by the I-shaped cross-section), which comprises the steps of taking a universal beam (A) making a cut (along surface 24) generally longitudinally along the web (12) thereof, making a second cut (along surface 25) along the web (12) on a path differing from the first path of the first cut, separating the cut halves (19, 20) of the beam (A) from the interior cut portion, and welding the halves together, wherein the desired depth is variable at a time of manufacture by making the first and second cuts to achieve the width of the material corresponding to the desired depth (Col. 2, Lines 51-54); wherein the desired depth of the structural beam is less than that of the/or each initial universal beam (A) from which it is produced and wherein the two halves (19, 20) of the cut beam (A) are not moved longitudinally relative one another before being welded together (Col. 2, Line 14-Col. 4, Line 10, Figs. 4 and 5).

4. Regarding Claims 1, 2, 6, 8 and 9, Nilsson discloses a method of forming a structural beam (7) with openings (20, 21) located in the web, which comprises the steps of taking a universal beam (2) making a cut (13) generally longitudinally along the web (3) thereof, making a second cut (14) along the web (12) on a path differing from the first path of the first cut (13), separating the cut halves (10, 11) of the beam (7) from the cutout portion defined by the first and second cuts, and welding the halves together; to produce a structural beam (7) of a desired depth (a width of material or ribbon (a wedge shaped recess) is defined by the two cuts (13, 14) of an amount equal to the desired "reduction in depth" of the structural beam (7)); wherein the desired depth is variable at the time of manufacture by making the first and second cuts to achieve the width of material (the wedge shaped portion of material that is cut out (Col. 3, Lines 51-55)) corresponding to the desired depth (inherently the size of the wedge shaped portion of material that is removed may be varied, so long as edge sections (13, 14) of the cut halves are formed and may be moved toward one another to form the structural beam); wherein the depth of the structural beam is less than that of the/or each initial universal beam (2) from which it is produced and wherein the two halves (10, 11) of the cut beam (2) are not moved longitudinally relative one another before being welded together (Col. 1, Lines 9-20 and Col. 2, Line 39-Col. 3, Line 29, Figs. 1, 4 and 5).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 3-5, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker (US Patent No. 4,894,898).
7. Regarding Claim 1, Walker discloses a method of producing a structural beam (10) with a web and openings located in the web, which comprises the steps of: taking at least one initial universal beam (10) making a first cut (18) generally longitudinally along the web of the or each initial universal beam on a first path; making a second cut (20) generally longitudinally along the web of the or each initial universal beam on a second path differing from the first path of the first cut to form cut halves, wherein the first and the second cuts (18, 20) are spaced apart from each other thereby defining a width of material (22, 23) there-between; separating the cut halves of the or each initial universal beam removing material (22, 23) between the first and second cut (18, 20); and welding the halves together, to produce a structural beam of a desired depth (Col. 2, Line 49-Col. 3, Line 10, Figs. 1A and 1B).

Walker does not explicitly disclose wherein the desired depth is variable at a time of manufacture. Walker does however disclose manufacturing the beam with a desired depth (1.5 Ds) by making first and second cuts (18, 20) to achieve a width of the material corresponding to the desired depth (1.5 Ds) (Col. 2, Line 53-Col. 3, Line 10, Fig. 1). It would have been obvious to one of ordinary skill in the art at the time of invention to vary the depth of the beam at the time of manufacture as claimed for the

benefit of producing structural beams of different depths to meet the requirements of structural dimensions per last minute design changes.

8. Regarding Claims 3 and 4, the aforementioned rejection as applied to claim 1 remains as previously applied. Walker discloses a method wherein the first and second cuts (18, 20) along the web can be such that any shape of openings (Col. 3, Lines 38-41, Figs. 2A and 3A) and any position of the openings can be obtained (Col. 4, Lines 18-26, Figs. 2A-4B).

9. Regarding Claim 5, The aforementioned rejection as applied to claim 1 remains as previously applied. Walker discloses wherein the cut halves of the/or each initial beam are separated and moved longitudinally relative to one another before being welded together (Col. 3, Lines 5-10, Figs. 1A and 1B).

10. Regarding Claims 8 and 9, the aforementioned rejection as applied to claim 1 remains as previously applied. It is noted that these claims are product-by-process claims. Product-by-process claims are not limited to the manipulations of recited steps, only the structure implied by the steps. See MPEP 2113 *Product-by Process claims*. Walker discloses a structural beam (10) comprised of two structural beam halves welded together (Col. 2, Line 49-Col. 3, Line 10, Figs. 1A and 1B).

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Walker (US Patent No. 4,894,898) in view of Litzka (US Patent No. 3,066,394).

12. Regarding Claim 7, the aforementioned rejection as applied to claim 1 remains as previously applied. Walker does not explicitly disclose wherein two or more universal

beams are cut and separated into halves and the halves from different cut universal beams are used to produce a structural beam.

13. Litzka discloses a method of forming a structural beam wherein two or more universal beams are cut and separated into halves and the halves from different cut universal beams are used to produce a structural beam for the benefit of providing structural beams having flanges with differing lengths (Col. 3, Line 71-Col. 4, Line 4, Figs. 9 and 10). It would have been obvious to one of ordinary skill in the art at the time of invention to produce the structural beam of Walker using a method wherein two or more universal beams are cut and separated into halves and the halves from the different cut universal beams are used to produce a structural beam as disclosed by Litzka for the benefit of providing structural beams having flanges with differing lengths.

14. Claims 1, 2, 6, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Booher (US Patent No. 4,586,646) in view of Townsend (US Patent No. 2,277,615).

15. Regarding Claims 1, 2, 6, 8 and 9, Booher discloses a method of forming a structural beam (74), with openings (71) located in the web, which comprises the steps providing structural beam halves (41, 46), making a cut (72) generally longitudinally along the web (12) of the first half (46) thereof, making a second cut (73) along the web (51) of the second half (41) on a path differing from the first path of the first cut (72) and welding the halves (41, 46) together to produce a structural beam (74) of a desired depth (characterized in that: a width of material or ribbon is defined by the two cuts (72, 73) of an amount equal to the desired "reduction in depth" of the structural beam (74));

wherein the desired depth is variable at the time of manufacture by making the first and second cuts to achieve the width of material corresponding to the desired depth; wherein the depth of the structural beam is less than that of the/or each initial universal beam from which it is produced and wherein the two halves (41, 46) of the cut beam are not moved longitudinally relative one another before being welded together (Col. 4, Lines 10-64, Figs. 1, 10 and 11).

Booher does not explicitly disclose that an initial universal beam is cut to produce "cut halves" utilized to form the structural beam. Booher however does disclose first half (46) is **cut away** at a specified location (72) and second half (41) has large portion of its web **cut away** at a specified location (73) (Col. 4, Lines 19-23, Fig. 10).

Townsend discloses a method of forming a structural beam (A) with openings located in the web (the openings being the channels defined on either side of the beam by the I-shaped cross-section), which comprises the steps of taking a universal beam (A) making a cut (along surface 24) generally longitudinally along the web (12) thereof, making a second cut (along surface 25) along the web (12) on a path differing from the first path of the first cut, separating the cut halves (19, 20) of the beam (A) from the interior cut portion, and welding the halves together, wherein the desired depth is variable at a time of manufacture by making the first and second cuts to achieve the width of the material corresponding to the desired depth (Col. 2, Lines 51-54). It would have been obvious to one of ordinary skill in the art to cut an initial universal beam to produce the structural beam halves of Booher; wherein the desired depth of the beam is variable at the time of manufacture, as disclosed by Townsend for the benefit of

producing structural beams of different depths to meet the requirements of structural dimensions per last minute design changes.

Response to Arguments

16. Applicant's arguments filed September 20, 2010 have been fully considered but they are not persuasive.

17. *Applicant argues Townsend does not disclose forming "cut halves" of the beam, as recited in amended claim 1, because, the cuts in Townsend do not traverse the entire beam to form "cut halves."*

18. Although the cuts made to remove the section of material in the Townsend reference do not fully transverse the beam, the examiner construes two "cut" halves are formed, since the universal beam of Townsend is cut to produce an upper half and a lower half separated by a gap made when a certain amount of material is removed from the universal beam. The two "halves" are consequently joined to form a structural beam. Furthermore, nowhere in the amended claim 1 does it disclose the universal beam must be fully traversed to form "cut" halves.

19. *Applicant argues the beam of Nilsson is not cut to form "cut halves," which are separated.*

20. The examiner respectfully disagrees. As stated in the above 35 USC § 102 rejection, Nilsson cuts and removes a wedge shaped portion of material from a universal beam (2) (Col. 3, Lines 51-55) to form the separated cut halves (10, 11) (Col. 2, Line 65-Col. 3, Line 13, Fig. 4). The examiner construes the depth of the structural

beam to be variable at the time of manufacture since the depth of the wedge portion of material to be removed is inherently variable, as long as edge sections (13, 14) are formed).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **BAYAN SALONE** whose telephone number is (571)270-7739. The examiner can normally be reached on **M-Th, 7:30 AM-5:00 PM EST**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571)-272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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